

ABSTRACT OF THE DISCLOSURE

An apparatus and method for thrusting plasma, utilizing a Hall thruster with segmented electrodes along the channel, which make the acceleration region as localized as possible. Also disclosed are methods of arranging the electrodes so as to minimize erosion and arcing. Also disclosed are methods of arranging the electrodes so as to produce a substantial reduction in plume divergence. The use of electrodes made of emissive material will reduce the radial potential drop within the channel, further decreasing the plume divergence. Also disclosed is a method of arranging and powering these electrodes so as to provide variable mode operation.